# Martin Picard

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 105 papers | 5,994 citations | 41 h-index | 76 g-index |
| 132 ext. papers | 7,730 ext. citations | 6.9 avg, IF | 6.31 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 105 | Human studies of mitochondrial biology demonstrate an overall lack of binary sex differences: A multivariate meta-analysis.. *FASEB Journal*, **2022**, 36, e22146 | 0.9 | 1 |
| 104 | Cellular specificity of mitochondrial and immunometabolic features in major depression.. *Molecular Psychiatry*, **2022**, | 15.1 | 1 |
| 103 | Integrating Sex and Gender in Mitochondrial Science. *Current Opinion in Physiology*, **2022**, 26, 100536 | 2.6 | 0 |
| 102 | Mitochondrial respiratory chain protein co-regulation in the human brain. *Heliyon*, **2022**, 8, e09353 | 3.6 | 0 |
| 101 | Leukocyte cytokine responses in adult patients with mitochondrial DNA defects. *Journal of Molecular Medicine*, **2022**, 100, 963-971 | 5.5 | 0 |
| 100 | The impact of perceived stress on the hair follicle: Towards solving a psychoneuroendocrine and neuroimmunological puzzle. *Frontiers in Neuroendocrinology*, **2022**, 101008 | 8.9 | 1 |
| 99 | Characterization of mitochondrial DNA quantity and quality in the human aged and Alzheimer's disease brain. *Molecular Neurodegeneration*, **2021**, 16, 75 | 19 | 2 |
| 98 | Author response: Mitochondrial phenotypes in purified human immune cell subtypes and cell mixtures **2021**, | | 3 |
| 97 | Blood-based mitochondrial respiratory chain function in major depression. *Translational Psychiatry*, **2021**, 11, 593 | 8.6 | 0 |
| 96 | Mitochondrial phenotypes in purified human immune cell subtypes and cell mixtures. *ELife*, **2021**, 10, | 8.9 | 14 |
| 95 | Mitochondria in epithelial ovarian carcinoma exhibit abnormal phenotypes and blunted associations with biobehavioral factors. *Scientific Reports*, **2021**, 11, 11595 | 4.9 | 4 |
| 94 | Quantitative mapping of human hair greying and reversal in relation to life stress. *ELife*, **2021**, 10, | 8.9 | 4 |
| 93 | Stress and circulating cell-free mitochondrial DNA: A systematic review of human studies, physiological considerations, and technical recommendations. *Mitochondrion*, **2021**, 59, 225-245 | 4.9 | 16 |
| 92 | The social nature of mitochondria: Implications for human health. *Neuroscience and Biobehavioral Reviews*, **2021**, 120, 595-610 | 9 | 16 |
| 91 | The biology of human hair greying. *Biological Reviews*, **2021**, 96, 107-128 | 13.5 | 25 |
| 90 | 3D neuronal mitochondrial morphology in axons, dendrites, and somata of the aging mouse hippocampus. *Cell Reports*, **2021**, 36, 109509 | 10.6 | 8 |
| 89 | Blood mitochondrial DNA copy number: What are we counting?. *Mitochondrion*, **2021**, 60, 1-11 | 4.9 | 13 |

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| 88 | Added sugar intake during pregnancy: Fetal behavior, birth outcomes, and placental DNA methylation. *Developmental Psychobiology*, **2021**, 63, 878-889 | 3 | 1 |
| 87 | Cheveux blancs : est-ce réversible ? **2021**, N° 138, 14-15 | | |
| 86 | An automated, high-throughput methodology optimized for quantitative cell-free mitochondrial and nuclear DNA isolation from plasma. *Journal of Biological Chemistry*, **2020**, 295, 15677-15691 | 5.4 | 2 |
| 85 | Circadian regulation of mitochondrial uncoupling and lifespan. *Nature Communications*, **2020**, 11, 1927 | 17.4 | 27 |
| 84 | Mitochondrial respiratory capacity modulates LPS-induced inflammatory signatures in human blood. *Brain, Behavior, & Immunity - Health*, **2020**, 5, 100080-100080 | 5.1 | 12 |
| 83 | Quantitative 3D Mapping of the Human Skeletal Muscle Mitochondrial Network. *Cell Reports*, **2019**, 26, 996-1009.e4 | 10.6 | 50 |
| 82 | Mitochondrial Psychobiology: Foundations and Applications. *Current Opinion in Behavioral Sciences*, **2019**, 28, 142-151 | 4 | 13 |
| 81 | Human aging DNA methylation signatures are conserved but accelerated in cultured fibroblasts. *Epigenetics*, **2019**, 14, 961-976 | 5.7 | 16 |
| 80 | Predictors of ccf-mtDNA reactivity to acute psychological stress identified using machine learning classifiers: A proof-of-concept. *Psychoneuroendocrinology*, **2019**, 107, 82-92 | 5 | 6 |
| 79 | Health and Disease-Emergent States Resulting From Adaptive Social and Biological Network Interactions. *Frontiers in Medicine*, **2019**, 6, 59 | 4.9 | 29 |
| 78 | Accelerating research on biological aging and mental health: Current challenges and future directions. *Psychoneuroendocrinology*, **2019**, 106, 293-311 | 5 | 24 |
| 77 | Acute psychological stress increases serum circulating cell-free mitochondrial DNA. *Psychoneuroendocrinology*, **2019**, 106, 268-276 | 5 | 40 |
| 76 | Pparg promotes differentiation and regulates mitochondrial gene expression in bladder epithelial cells. *Nature Communications*, **2019**, 10, 4589 | 17.4 | 21 |
| 75 | Mitochondrial DNA Variation Dictates Expressivity and Progression of Nuclear DNA Mutations Causing Cardiomyopathy. *Cell Metabolism*, **2019**, 29, 78-90.e5 | 24.6 | 35 |
| 74 | Reply. *Environmental and Molecular Mutagenesis*, **2019**, 60, 465 | 3.2 | |
| 73 | Mitochondrial DNA, nuclear context, and the risk for carcinogenesis. *Environmental and Molecular Mutagenesis*, **2019**, 60, 455-462 | 3.2 | 3 |
| 72 | A Mitochondrial Health Index Sensitive to Mood and Caregiving Stress. *Biological Psychiatry*, **2018**, 84, 9-17 | 7.9 | 50 |
| 71 | Protective role of Parkin in skeletal muscle contractile and mitochondrial function. *Journal of Physiology*, **2018**, 596, 2565-2579 | 3.9 | 41 |

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|---|---|---|---|
| 70 | Circulating cell-free mitochondrial DNA, but not leukocyte mitochondrial DNA copy number, is elevated in major depressive disorder. *Neuropsychopharmacology*, **2018**, 43, 1557-1564 | 8.7 | 82 |
| 69 | Psychological Stress and Mitochondria: A Systematic Review. *Psychosomatic Medicine*, **2018**, 80, 141-153 | 3.7 | 94 |
| 68 | Associations Between Cellular Aging Markers and Metabolic Syndrome: Findings From the CARDIA Study. *Journal of Clinical Endocrinology and Metabolism*, **2018**, 103, 148-157 | 5.6 | 30 |
| 67 | Psychological Stress and Mitochondria: A Conceptual Framework. *Psychosomatic Medicine*, **2018**, 80, 126-140 | 3.7 | 71 |
| 66 | An energetic view of stress: Focus on mitochondria. *Frontiers in Neuroendocrinology*, **2018**, 49, 72-85 | 8.9 | 181 |
| 65 | Aggressive triple negative breast cancers have unique molecular signature on the basis of mitochondrial genetic and functional defects. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2018**, 1864, 1060-1071 | 6.9 | 26 |
| 64 | Depression, telomeres and mitochondrial DNA: between- and within-person associations from a 10-year longitudinal study. *Molecular Psychiatry*, **2018**, 23, 850-857 | 15.1 | 41 |
| 63 | Subcellular origin of mitochondrial DNA deletions in human skeletal muscle. *Annals of Neurology*, **2018**, 84, 289-301 | 9.4 | 24 |
| 62 | Multilevel heterogeneity of mitochondrial respiratory chain deficiency. *Journal of Pathology*, **2018**, 246, 261-265 | 9.4 | 6 |
| 61 | Mitochondrial dynamics in adaptive and maladaptive cellular stress responses. *Nature Cell Biology*, **2018**, 20, 755-765 | 23.4 | 227 |
| 60 | Mitochondrial energy deficiency leads to hyperproliferation of skeletal muscle mitochondria and enhanced insulin sensitivity. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 2705-2710 | 11.5 | 52 |
| 59 | Mitochondrial DNA 3243A>G heteroplasmy is associated with changes in cytoskeletal protein expression and cell mechanics. *Journal of the Royal Society Interface*, **2017**, 14, | 4.1 | 6 |
| 58 | Mitochondrial Nanotunnels. *Trends in Cell Biology*, **2017**, 27, 787-799 | 18.3 | 56 |
| 57 | Mitochondrial Nexus to Allostatic Load Biomarkers. *Psychosomatic Medicine*, **2017**, 79, 114-117 | 3.7 | 10 |
| 56 | Independent impacts of aging on mitochondrial DNA quantity and quality in humans. *BMC Genomics* , **2017**, 18, 890 | 4.5 | 69 |
| 55 | Evidence Suggesting Absence of Mitochondrial DNA Methylation. *Frontiers in Genetics*, **2017**, 8, 166 | 4.5 | 85 |
| 54 | Mitochondrial DNA copy number is reduced in male combat veterans with PTSD. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, **2016**, 64, 10-7 | 5.5 | 56 |
| 53 | The Spectrum of Mitochondrial Ultrastructural Defects in Mitochondrial Myopathy. *Scientific Reports*, **2016**, 6, 30610 | 4.9 | 99 |

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|---|---|---|---|
| 52 | Social Inequalities and the Road to Allostatic Load: From Vulnerability to Resilience **2016**, 1-54 | | 12 |
| 51 | Expanding Our Understanding of mtDNA Deletions. *Cell Metabolism*, **2016**, 24, 3-4 | 24.6 | 12 |
| 50 | Failed upregulation of TFAM protein and mitochondrial DNA in oxidatively deficient fibers of chronic obstructive pulmonary disease locomotor muscle. *Skeletal Muscle*, **2016**, 6, 10 | 5.1 | 27 |
| 49 | Mitochondrial Signaling and Neurodegeneration **2016**, 107-137 | | 3 |
| 48 | Genetic Evidence for Elevated Pathogenicity of Mitochondrial DNA Heteroplasmy in Autism Spectrum Disorder. *PLoS Genetics*, **2016**, 12, e1006391 | 6 | 34 |
| 47 | The ageing neuromuscular system and sarcopenia: a mitochondrial perspective. *Journal of Physiology*, **2016**, 594, 4499-512 | 3.9 | 66 |
| 46 | Formation of mitochondrial-derived vesicles is an active and physiologically relevant mitochondrial quality control process in the cardiac system. *Journal of Physiology*, **2016**, 594, 5343-62 | 3.9 | 76 |
| 45 | Allostatic load and comorbidities: A mitochondrial, epigenetic, and evolutionary perspective. *Development and Psychopathology*, **2016**, 28, 1117-1146 | 4.3 | 35 |
| 44 | Mechanisms of Chronic Muscle Wasting and Dysfunction after an Intensive Care Unit Stay. A Pilot Study. *American Journal of Respiratory and Critical Care Medicine*, **2016**, 194, 821-830 | 10.2 | 122 |
| 43 | Complex mitochondrial DNA rearrangements in individual cells from patients with sporadic inclusion body myositis. *Nucleic Acids Research*, **2016**, 44, 5313-29 | 20.1 | 28 |
| 42 | Mitochondrial DNA Depletion in Respiratory Chain-Deficient Parkinson Disease Neurons. *Annals of Neurology*, **2016**, 79, 366-78 | 9.4 | 131 |
| 41 | The rise of mitochondria in medicine. *Mitochondrion*, **2016**, 30, 105-16 | 4.9 | 258 |
| 40 | Mitochondrial synapses: intracellular communication and signal integration. *Trends in Neurosciences* , **2015**, 38, 468-74 | 13.3 | 32 |
| 39 | Mitochondrial functions modulate neuroendocrine, metabolic, inflammatory, and transcriptional responses to acute psychological stress. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E6614-23 | 11.5 | 150 |
| 38 | Relationship between Autophagy and Ventilator-induced Diaphragmatic Dysfunction. *Anesthesiology*, **2015**, 122, 1349-61 | 4.3 | 26 |
| 37 | The trajectory of life. Decreasing physiological network complexity through changing fractal patterns. *Frontiers in Physiology*, **2015**, 6, 169 | 4.6 | 31 |
| 36 | Mitochondrial morphology is altered in atrophied skeletal muscle of aged mice. *Oncotarget*, **2015**, 6, 17923-37 | 3.3 | 139 |
| 35 | Trans-mitochondrial coordination of cristae at regulated membrane junctions. *Nature Communications*, **2015**, 6, 6259 | 17.4 | 101 |

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| 34 | Mechanical ventilation triggers abnormal mitochondrial dynamics and morphology in the diaphragm. *Journal of Applied Physiology*, **2015**, 118, 1161-71 | 3.7 | 52 |
| 33 | Mitochondrial allostatic load puts the ﬂuc back in glucocorticoids. *Nature Reviews Endocrinology*, **2014**, 10, 303-10 | 15.2 | 212 |
| 32 | Chronic stress increases vulnerability to diet-related abdominal fat, oxidative stress, and metabolic risk. *Psychoneuroendocrinology*, **2014**, 46, 14-22 | 5 | 79 |
| 31 | Mitochondria impact brain function and cognition. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7-8 | 11.5 | 133 |
| 30 | In vivo microscopy reveals extensive embedding of capillaries within the sarcolemma of skeletal muscle fibers. *Microcirculation*, **2014**, 21, 131-47 | 2.9 | 31 |
| 29 | Progressive increase in mtDNA 3243A>G heteroplasmy causes abrupt transcriptional reprogramming. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4033-42 | 11.5 | 180 |
| 28 | Role of peroxisome proliferator-activated receptor gamma coactivator 1-alpha (PGC-1) in denervation-induced atrophy in aged muscle: facts and hypotheses. *Longevity & Healthspan*, **2013**, 2, 13 | | 18 |
| 27 | Mitochondrial morphology, topology, and membrane interactions in skeletal muscle: a quantitative three-dimensional electron microscopy study. *Journal of Applied Physiology*, **2013**, 114, 161-71 | 3.7 | 137 |
| 26 | Linking the metabolic state and mitochondrial DNA in chronic disease, health, and aging. *Diabetes*, **2013**, 62, 672-8 | 0.9 | 69 |
| 25 | Mitochondrial morphology transitions and functions: implications for retrograde signaling?. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2013**, 304, R393-406 | 3.2 | 164 |
| 24 | Acute exercise remodels mitochondrial membrane interactions in mouse skeletal muscle. *Journal of Applied Physiology*, **2013**, 115, 1562-71 | 3.7 | 89 |
| 23 | Allostatic load as a tool for monitoring physiological dysregulations and comorbidities in patients with severe mental illnesses. *Harvard Review of Psychiatry*, **2013**, 21, 296-313 | 4.1 | 41 |
| 22 | Is the whole greater than the sum of the parts? Self-rated health and transdisciplinarity. *Health*, **2013**, 05, 24-30 | 0.4 | 14 |
| 21 | Contractile In/Activity Influence Mitochondrial Morphology and Membrane Interactions in Mouse Skeletal Muscle. *FASEB Journal*, **2013**, 27, 1202.2 | 0.9 | |
| 20 | Mitochondrial functional specialization in glycolytic and oxidative muscle fibers: tailoring the organelle for optimal function. *American Journal of Physiology - Cell Physiology*, **2012**, 302, C629-41 | 5.4 | 113 |
| 19 | Mitochondrial dysfunction and lipid accumulation in the human diaphragm during mechanical ventilation. *American Journal of Respiratory and Critical Care Medicine*, **2012**, 186, 1140-9 | 10.2 | 600 |
| 18 | Mitochondria: starving to reach quorum?: Insight into the physiological purpose of mitochondrial fusion. *BioEssays*, **2012**, 34, 272-4 | 4.1 | 14 |
| 17 | Mitochondrial function in permeabilized cardiomyocytes is largely preserved in the senescent rat myocardium. *PLoS ONE*, **2012**, 7, e43003 | 3.7 | 20 |

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| 16 | Mitochondrial Functional Specialization in Glycolytic and Oxidative Muscle Fibers: Tailoring the Organelle for Optimal Function. *FASEB Journal*, **2012**, 26, 887.19 | 0.9 | |
| 15 | The need for a trans-disciplinary, global health framework. *Journal of Alternative and Complementary Medicine*, **2011**, 17, 179-84 | 2.4 | 9 |
| 14 | A transdisciplinary perspective of chronic stress in relation to psychopathology throughout life span development. *Development and Psychopathology*, **2011**, 23, 725-76 | 4.3 | 167 |
| 13 | Alterations in intrinsic mitochondrial function with aging are fiber type-specific and do not explain differential atrophy between muscles. *Aging Cell*, **2011**, 10, 1047-55 | 9.9 | 97 |
| 12 | Mitochondria: isolation, structure and function. *Journal of Physiology*, **2011**, 589, 4413-21 | 3.9 | 161 |
| 11 | Pathways to aging: the mitochondrion at the intersection of biological and psychosocial sciences. *Journal of Aging Research*, **2011**, 2011, 814096 | 2.3 | 22 |
| 10 | Mitochondrial structure and function are disrupted by standard isolation methods. *PLoS ONE*, **2011**, 6, e18317 | 3.7 | 206 |
| 9 | Differences in Extent of Age-related Atrophy Between Muscles is Associated with Mitochondrial ROS Production But Not with PTP Sensitivity. *FASEB Journal*, **2011**, 25, 1114.1 | 0.9 | |
| 8 | Mitochondrial functional impairment with aging is exaggerated in isolated mitochondria compared to permeabilized myofibers. *Aging Cell*, **2010**, 9, 1032-46 | 9.9 | 156 |
| 7 | Resistance to Ca2+-induced opening of the permeability transition pore differs in mitochondria from glycolytic and oxidative muscles. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2008**, 295, R659-68 | 3.2 | 62 |
| 6 | The mitochondrial phenotype of peripheral muscle in chronic obstructive pulmonary disease: disuse or dysfunction?. *American Journal of Respiratory and Critical Care Medicine*, **2008**, 178, 1040-7 | 10.2 | 66 |
| 5 | Phenotype-Specific Permeability Transition Pore Regulation in Rat Skeletal Muscle. *FASEB Journal*, **2008**, 22, 962.4 | 0.9 | |
| 4 | Why Do We Care More About Disease than Health?. *Phenomics*,1 | | 0 |
| 3 | Mitochondrial phenotypes in purified human immune cell subtypes and cell mixtures | | 2 |
| 2 | Acute Psychological Stress Triggers Circulating Cell-Free Mitochondrial DNA | | 2 |
| 1 | Mouse brain-wide mitochondrial connectivity anchored in gene, brain and behavior | | 2 |